

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
TOBY H. KUSHMER
MCDERMOTT WILL & EMERY LLP
28 STATE STREET
BOSTON, MA 02109

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

22 MAR 2006

Applicant's or agent's file reference

MCMK-3A-PC

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US05/01864

International filing date (day/month/year)

21 January 2005 (21.01.2005)

Priority date (day/month/year)

21 January 2004 (21.01.2004)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): G11B 7/00, 7/24, 3/70 and US Cl.: 369/121,275.3,284,288

Applicant

MICROCONTINUUM, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Date of completion of this
opinion

11 March 2006 (11.03.2006)

Authorized officer

William Korzuch

Telephone No. 703-305-4700

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/01864

10/588 066

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US05/01864

Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>4-6,13,14,16,18,19 and 21</u>	YES
	Claims <u>1-3,7-12,15,17 and 20</u>	NO
Inventive step (IS)	Claims <u>4-6,13,14,16,18,19 and 21</u>	YES
	Claims <u>1-3,7-12,15,17 and 20</u>	NO
Industrial applicability (IA)	Claims <u>1-21</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Claims 1-3, 7-12, 15, 17 and 20 lack novelty under PCT Article 33(2) as being anticipated by NAKAYAMA ET AL. NAKAYAMA ET AL. discloses a pre-formatted optical data storage tape (see figure 4(d)) comprising: an elongated linear polymer layer (2 & 23) having at least one pattern of optically readable embossments (guiding grooves) on at least one surface of the polymer layer; and an optical recording layer (25) covering the pattern of optically readable embossments of the elongated linear polymer layer, wherein the optical recording layer (25) is adapted such that recorded marks may be made in the recording layer by directing a focused source of energy into the recording layer. See also, figure 6.

Claims 4-6, 13, 14, 16, 18, 19 and 21 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a pre-formatted optical data storage tape including the elongated linear polymer layer and optical recording layer as claimed, further including either: an optical head array as claimed; a recording layer including a dielectric layer, phase change recording layer and a reflection/thermal control/nucleation layer as claimed; a back coat layer as claimed; or that the pattern of optically readable embossments including at least one of header information, servo and error correction information, pre-recorded digital information, and pre-recorded analog information as claimed.

Claims 1-21 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.